RUTGERS
School of Graduate Studies

iJOBS Workshop: Applying to Biomedical Faculty Jobs

Primarily Undergraduate Institutions

July 20, 2023

Topics to be covered today:

How to select a postdoc that will eventually help you land an academic career
Discussing with your postdoc PI the project that you will take with you and getting them to help you advance your career
What other things you should be doing during your postdoc to be ready to apply for faculty jobs
Deciding R1 vs PUI
Finding academic jobs to apply to
Preparing the research statement
Preparing the teaching and diversity statements
Preparing the job talk
Preparing the chalk talk
Preparing for the interview itself and tips
Negotiating offers
Setting up the lab
Filling your lab with students, postdocs and techs
Teaching for the first time and preparing classes
Service to the school
Preparing for tenure and expectations
Applying for K99/R00 grants

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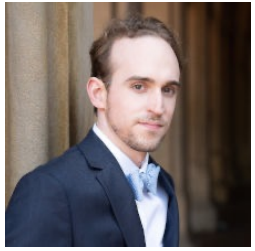

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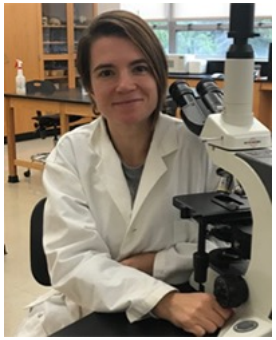

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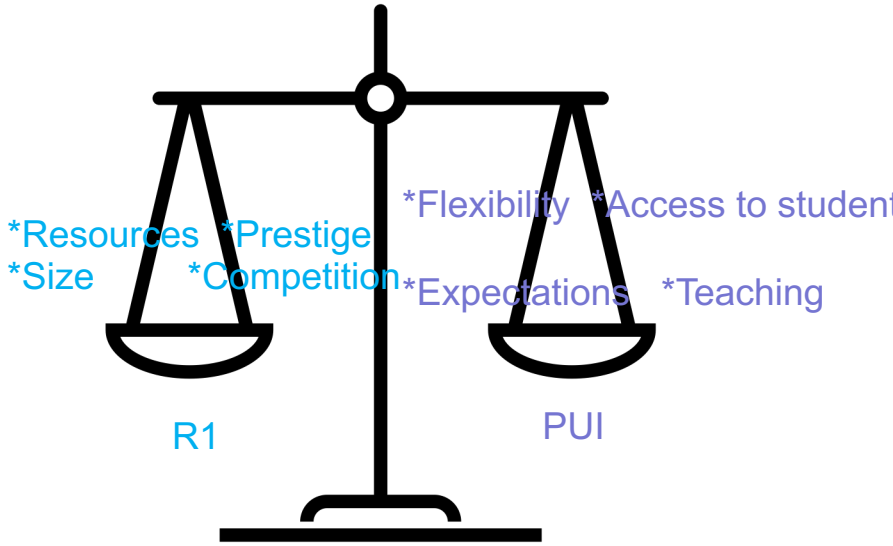
Deciding R1 vs PUI

Main Considerations:

- Is what you want to do appropriate for a PUI?
- Do you like teaching in a classroom setting?
- Expectations are scaled to the startup cost.



Selecting a postdoc that will eventually help you land an academic career at a PUI

- Wide range of institutions
  - Community College
  - PUI R3 (moderate research activity)
- Commonality: Teacher-Scholar Faculty
  - How to obtain needed teaching experience?
    - Lack of teaching opportunity noted as negative impact to success (2023 National Postdoctoral Association survey)
  - How to grow and maintain a feasible research base?
    - Even PUI Faculty at 100% teaching expectation need to show scholarly and professional achievement for promotion.

- NIGMS - Institutional Research and Academic Career Development Award (IRACDA) (K12)
  - Institutional
    - (note NIH F32 explicitly states one cannot teach during award)
  - Research *and* Mentored Teaching at outside institution (75:25 split)
  - May have opportunity to be instructor of record for a course
- NSF Postdoctoral Research Fellowships in Biology (PRFB)
  - Individual
  - Research *and* may propose Mentored Teaching (tied to sponsoring scientist)
  - Cannot be instructor of record for a course

Discussing with your postdoc PI the project that you will take with you and getting them to help you advance your career

- Have these discussions **early** in your postdoc when you are discussing projects
- Be honest with your PI about your career plans
- Have discussions regularly (at least once per year) to update plans

Discussing with your postdoc PI the project that you will take with you and getting them to help you advance your career

Key things to discuss:

- Which projects can you take with you that will be completely yours?
- Which projects can you continue to collaborate on?
- What kinds of resources (ie. strains, constructs, etc.) are they willing to let you take with you?
- What are the expectations during your postdoc for allowing for the development of your own project?
  - Will the project(s) you carry with you be something you work on from the beginning of your postdoc or closer to the end? Are you expected to work on this project on the side?
- Can you generate preliminary data for your first grant so that you have momentum going into your first year?

Discussing with your postdoc PI the project that you will take with you and getting them to help you advance your career

When you are applying for jobs and beyond:

- Be sure at this point you are on the same page about what you are taking with you.
- Ask them to read your research statement.
- Continue to collaborate if your new institution counts collaborative work towards tenure (many PUIs do).
- Continue to reach out to them as a mentor

What other things you should be doing during your postdoc to be ready to apply for faculty jobs

- **Research Excellence**: Publish in reputable journals, present at conferences, and collaborate with others.
- **Grant Writing**: Gain experience in writing research proposals and securing funding.
- **Teaching Experience**: Obtain teaching experience through courses and guest lecturing.
- **Mentoring and Supervision**: Engage in mentoring roles with students.
- **Networking**: Build connections with researchers and faculty members.
- **Leadership and Service**: Take on leadership roles and participate in service activities.
- **Industry Engagement**: Collaborate with industry partners or intern in relevant fields.
- **Professional Development**: Attend workshops and courses to enhance skills.
- **Research Independence**: Develop an independent research program.
- **Teaching and Research Statements**: Craft compelling statements highlighting teaching philosophy and research goals.

Finding academic jobs to apply to

Where to look:

THE CHRONICLE OF HIGHER EDUCATION | JOBS https://jobs.chronicle.com/

ScienceCareers FROM THE JOURNAL SCIENCE AAAS https://jobs.sciencecareers.org/

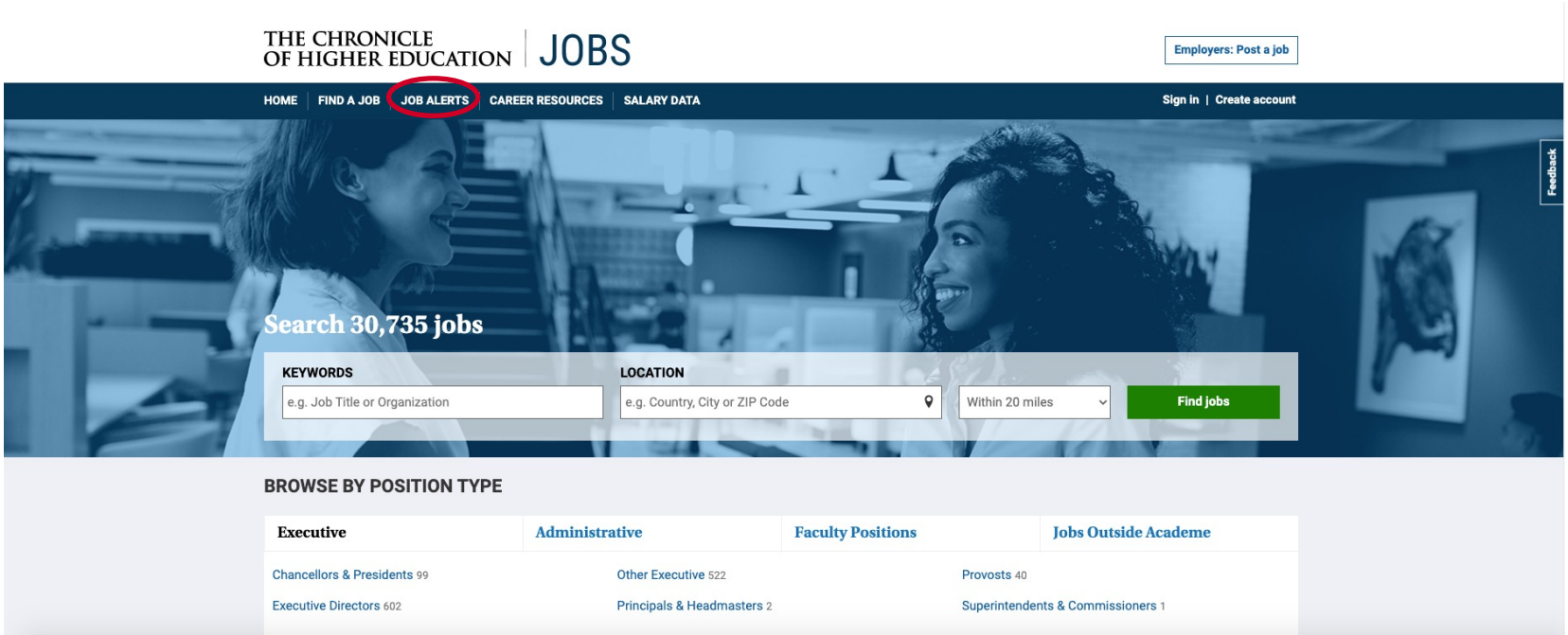
nature careers https://www.nature.com/naturecareers/searchjobs/

HigherEdJobs https://www.higheredjobs.com/

Indeed, LinkedIn, Listservs

Finding academic jobs to apply to

How to look:



Finding academic jobs to apply to

How to look – Choosing your keywords

- Use the title of the position you want to search for (Assistant Professor)

- Search using a variety of keywords for your expertise
  - You could start more generally (ie. Biology)
  - Then also search using more specific terms (ie. Molecular Biology, Microbiology, Biochemistry)

Finding academic jobs to apply to

Decoding the Job Ad

There are a lot of different kinds of PUIs with different expectations for teaching and research

- Some ads will list the teaching load
  - Could be listed as hours per year or semester or courses per year or semester
- Research Expectations
  - “develop a research program with undergraduates”
  - “productive research program with undergraduate students”
  - “externally funded research program”
- Do your own research on the Institution

Networking (with the purpose of getting a faculty job at PUI)

- No recipe and no instant results!!!
  - Definitely increases your chances
  - Start one-two years in advance
- Make it **intentional** (focused)
  - (Re)connect to your former mentors – heads up about your job search
  - **Key!** – connect and build professional relationships with people who are PUI faculty or administrators
  - Aim for “quality” (meaningful connections) not ”quantity”
  - Attend, volunteer or serve as a judge at undergraduate conferences
  - Look for opportunities to guest lecture at PUIs
  - Dedicate time every other day or every week.

Memorable human interaction is more likely to result in a meaningful professional connection

Networking

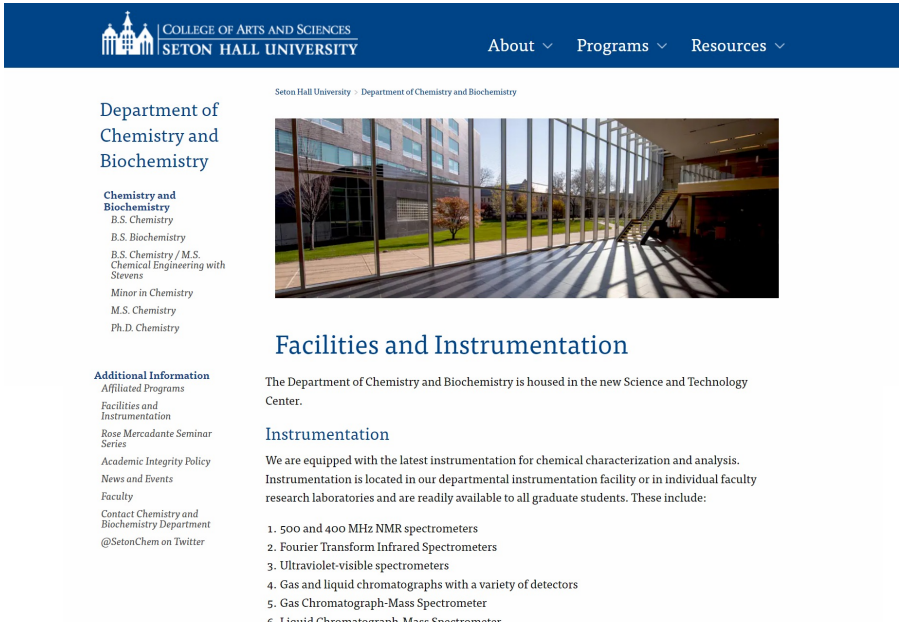
- Common formats of networking (not limited to):
  - In-person (meetings, conferences, workshops, career panels, etc.)
  - Web platforms (E-mail and e-mail lists, LinkedIn, Twitter, Instagram, *Facebook*)
- Tips for web platforms:
  - Separate personal and professional profiles
  - Keep professional profiles up to date and maintain regular presence
  - Send a custom/**personalized message** when asking connect on LinkedIn
  - Post about your job search (if comfortable)
- Tips for in-person events:
  - Create and order **business cards**
  - **Talk to people, share your experiences** and **ask questions** as much as possible
  - Attend informal gatherings at large meetings (Ex: Happy Hours)
  - Connect via web platform within 2-3 days after the event

Ultimate goal:
Build a **support** network

Preparing the Research Statement

Main Advice:

- Propose research your institution can <u>afford</u>
- Make the science exciting and accessible
- Explicitly mention how you'll incorporate students



Preparing the Teaching Statement

Purpose/What the Search Committee wants to learn about you:

- Get a better idea of your teaching experience
  - Which courses have you taught? Were you a TA or lecturer? What were your responsibilities? How many lectures did you teach?

- Get an idea of what your classroom is like
  - Do you use active learning and/or technology? If so, how do you use them?
  - Give specific examples

Preparing the Teaching Statement

Purpose/What the Search Committee wants to learn about you:

- Learn about your teaching philosophy/approach to teaching
  - How do you view your role in the classroom? Even if you write a separate DEI statement, include ideas around inclusive teaching if this is something you practice.
- Learn about your fit to teach the courses they need and their students
  - If the job ad lists the courses they want the candidate to teach, specifically mention your ability to teach those courses.
  - Look at their existing course catalog. Include courses already there you think you could teach, and think of additional courses you could develop to enhance their offerings.

Preparing the Teaching Statement

What to include:

- Specific examples will make it more genuine and show that you do have experience in the classroom and have ideas on teaching.
- If you do not have a lot of classroom experience, a lot of applicants write about their mentoring of undergraduates in the lab.
- If you have student evaluations, include your ratings (if positive) and one quotation that illustrates you as an instructor.
- Specific courses you are prepared (and excited) to teach

Authenticity!

Preparing the diversity statement

(and What are search committees looking for?)

- Based on **YOUR experiences** and relationship to the topics and issues of diversity, equity, inclusion, belonging and social justice. Provide **personal examples**.
  - What hardships (if any) did you experience and how will they inform your interactions with your students? How will you relate and connect to your students?
  - Why and how will you be a role model to your students?
  - How will you create a welcoming learning environment where students of *diverse ages, backgrounds, and cultures* can succeed? How will you support struggling students?
  - How are you leading/participating in initiatives or learning about equity and inclusion in STEM?
  - How will you contribute to the efforts and help to resolve issues that the institution is facing?

Diversity Statement

There is no template!

- **What to avoid**
  - Generic (cliché) statements and assumptions
  - Excessively mentioning that you will teach ALL the students without going into specifics
  - Saying that
    - … “you feel or understand someone’s pain”
    - your experiences are equivalent to someone else’s (if you are *privileged*)
- **How to get started?**
  - Think of and list all your experiences that involve issues and successes related to DEI and social justice → story
  - Educate yourself and learn the language and history
- **Get feedback** preferably from someone who has experience in DEI field

Resources and Support ←→ !!!Networking!!!

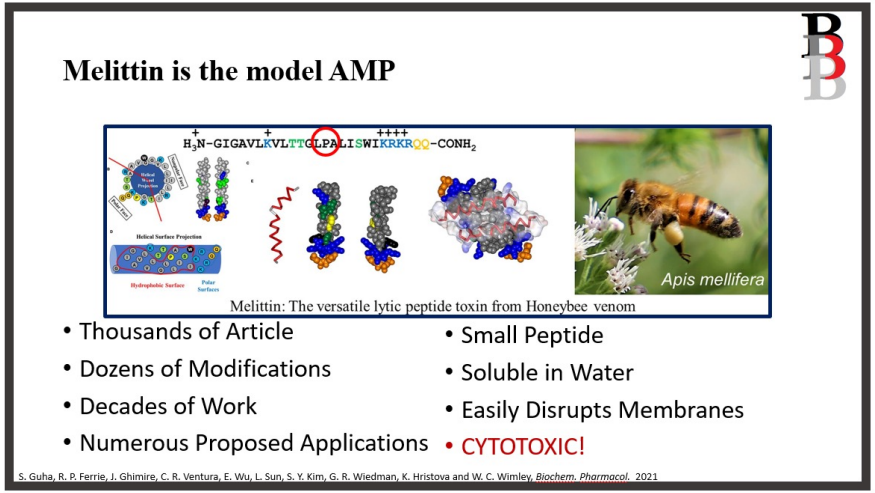
- DEI officials, experts and advocates at your current or former institutions
- How to write a diversity statement
  - by the dean of social sciences in the College of Liberal Arts and Sciences and a professor at Arizona State University
- 5 Tips for Writing a Diversity Statement
- Diversity Statements by UNC Chapel Hill
- Breaking Down Diversity Statements
- SABER's Diversity & Inclusion Efforts - LINK
- ASCB resources on Diversity, Equity, and Inclusion - LINK

Preparing the Job Talk

Main Advice:

- Make it accessible!
- Engage the audience with Active Learning
- FINISH ON TIME

Remember: if they brought you to campus they're considering you. Take it seriously.



Preparing for the interview itself and tips

- **Research the institution:** Understand its mission, values, and academic programs.
- **Know the job description:** Align your experience with the position's requirements.
- **Anticipate interview questions:** Prepare concise responses highlighting your strengths.
- **Highlight accomplishments:** Use specific examples to demonstrate expertise and potential.
- **Develop teaching philosophy:** Articulate teaching methods and approaches to inclusivity.
- **Stay updated:** Stay informed about recent developments in your field.
- **Prepare questions:** Show interest in the institution and inquire about support.
- **Practice mock interviews:** Refine responses, delivery, and build confidence.
- **Professional appearance:** Dress professionally and maintain a positive demeanor.
- **Be yourself and stay positive:** Let your passion and authenticity shine through.

Negotiating offers

- Know the average salary by instructional type of the institution, peer institutions, nation (Chronicles of Higher Education Salary Data)
- Feasible research start-up package, budget with timetable (tied to faculty handbook/formal communication on tenure and promotion). Budget might include release time. Consider Course-based Undergraduate Research Experiences (CUREs)
- Professional development plan, budget with timetable (tied to faculty handbook/formal communication on tenure and promotion)

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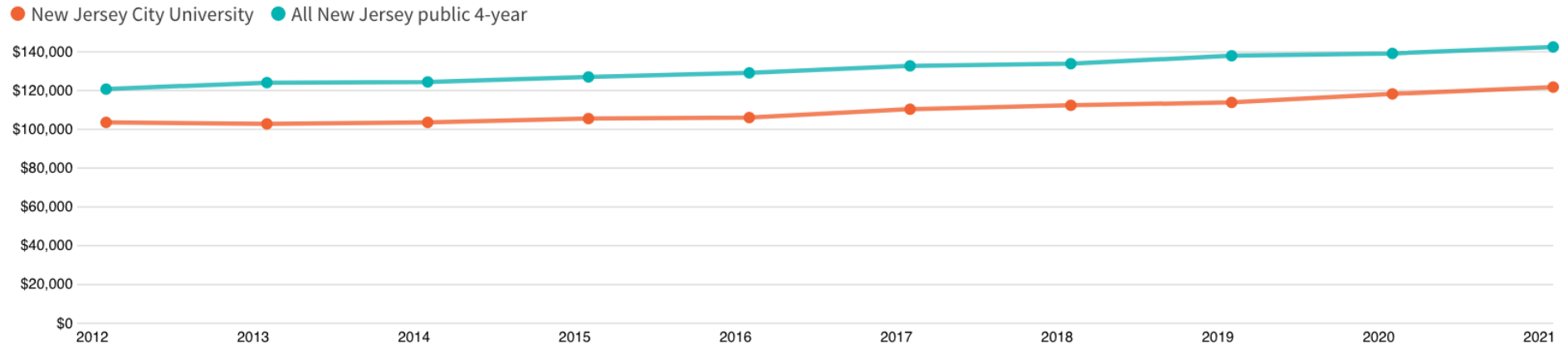
INSTITUTION TYPE | STATE	TOTAL AT RANK	MEN AT RANK	WOMEN AT RANK	TOTAL AVERAGE 9-MONTH-EQUIVALENT SALARY	MEN AVERAGE 9-MONTH-EQUIVALENT SALARY	WOMEN AVERAGE 9-MONTH-EQUIVALENT SALARY
U.S. All types	615,375	314,100	301,275	$89,156	$97,029	$80,948
New Jersey City University Public 4-year | New Jersey	237	123	114	$103,213	$103,047	$103,391

Professors | Associate professors | Assistant professors | Instructors | Lecturers | No rank | All ranks

Adjust for Inflation

Total | Men | Women



Setting up the Lab (1/2)

- What is available to you?
  - Funds, shared resources (equipment, staff), students available, etc.
- What is the purpose of your lab? → Essential equipment
- Budget → New vs. second-hand vs. leasing
- Space → measure beforehand. Consider the layout.
- Processes → procurement, safety, waste
- Don’t forget the consumables!

Setting up the Lab (2/2)

- You are in charge! Don't panic.
  - Start doing something.
  - Establish realistic expectations of what is possible to do in your first semester, first year, etc.
  - It is extremely common to experience a decrease in research output when starting a new lab.
  - Use your mentors!!
- Lab culture is important. Set clear lab expectations.
  - Consider a written lab agreement that outlines expectations for you and your lab members.

Filling the Lab with Students (1/3)

- Where do you find them?
  - Department level: Website and/or information session.
  - Courses: Identify and contact students who are doing well in classes and/or exhibit enthusiasm and motivation.
  - Ask colleagues, undergraduate advising staff, and TAs about prospective students.
- The Process
  - Write a short description of your research at the appropriate level.
  - Pitch the research both with respect to its significance to you and the potential significance and value to the student.

Filling the Lab with Students (2/3)

- The Process *(cont.)*
  - Be specific in what you are seeking. Describe expectations, hours, wages or academic credit, and potential outcomes.
  - Interview prospective students.
    - What appeals to you about doing research and what do you hope to gain?
    - What are your aspirations after college?
    - What biology courses have you particularly enjoyed and what aspects of those courses did you especially like?
    - What are your competing commitments and how much time can you realistically allocate to research?
    - How long would you like to participate in this project (e.g., one summer, one semester, multiple years)?

Filling the Lab with Students (3/3)

- Be a good research mentor
  - Be thoughtful in the design of the research project:
    - A finite project that meaningfully contributes to the larger picture.
  - Set clear expectations for both of you.
  - Check in regularly (lab meetings?)

Teaching for the first time and preparing classes

- **Understand the Course:** Familiarize yourself with objectives and expectations.
- **Plan Ahead:** Create detailed lesson plans and organize content logically.
- **Engage Students:** Use interactive methods and encourage participation.
- **Clear Communication:** Be concise, listen actively, and provide feedback.
- **Use Visual Aids:** Incorporate visuals for enhanced understanding.
- **Time Management:** Allocate time effectively and maintain pace.
- **Assess Student Learning:** Design assessments aligned with objectives.
- **Adapt to Student Needs:** Be flexible and accommodate diverse learners.
- **Seek Feedback:** Encourage student input for improvement.
- **Reflect and Improve:** Continuously enhance teaching skills and stay updated.

Service to the School (1/2)

- Activities that contribute to the University and Community.
  - Service to the Institution
  - Community and Civic Engagement
  - Service to the Discipline or Profession
- Making Decisions
  - Review the tenure-track evaluation standards and your contract.
  - What counts as service? Not all service is the same
  - Consider your strengths and interests.

Service to the School (2/2)

- Goal of the committee. Who are the other members?
- Length of the commitment service.
- What is the time commitment.
- Be strategic. Avoid a quick “yes”
  - Why are you asking me? What unique contributions are you thinking I would bring?
  - Inquire with others about this role and ask them, "How will serving on this committee help me as a new faculty member?"
- Document, Document, Document

Preparing for tenure and expectations

- Faculty handbook and formal communication process at hiring
- Plan a strategy for the probationary period leading up to tenure and promotion
  - PUI Faculty are Teacher-Scholar, consider Course-based Undergraduate Research Experiences (CUREs)
    - Genomics Education Partnership Sea-Phages Tiny Earth
- Professional society funding
- NIH, R15
- NSF, RUI
- Teaching (certificates, course proposals, teaching as research)
- Service (local, national)

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